

IN THE CLAIMS:

The following is a complete listing of the claims in this application, reflects all changes currently being made to the claims, and replaces all earlier versions and all earlier listings of the claims:

1. and 2. (Canceled).

3. (Currently Amended) The liquid discharge apparatus according to Claim ~~[[1]]~~ 11, further comprising a driving signal supply means for supplying a driving signal for allowing the liquid to eject from said liquid discharge head.

4. (Currently Amended) The liquid discharge apparatus according to Claim ~~[[1]]~~ 11, further comprising a conveyance means for conveying the medium to be recorded which receives the liquid discharged from said liquid discharge head.

5.-10. (Canceled).

11. (Currently Amended) A liquid discharge apparatus ~~according to Claim 10, comprising:~~  
a liquid discharge head comprising a discharge port for discharging liquid;  
a liquid flow path communicating with the discharge port and having a  
bubble generating region for generating a bubble;

a discharge energy generating element for generating thermal energy for generating the bubble in the liquid inside the bubble generating region;

a movable member facing said discharge energy generating element and spaced apart from said discharge energy generating element, an end portion of said movable member being situated at an upstream side in the flow direction of the liquid inside said liquid flow path being fixed and a downstream end of said movable member being a free end;

a temperature sensor for periodically detecting, at a predetermined period, a temperature inside said liquid flow path;

means for controlling or stopping the driving of said discharge energy generating element by estimating that the liquid is no longer being supplied into said liquid flow path, based on data on temperature rise per period, detected by said temperature sensor and printing data; and

an estimating means for estimating that liquid supply to said liquid flow path has become abnormal, by comparing the data on temperature rise per unit hour detected by said temperature sensor and data on temperature rise determined in accordance with the printing data,

wherein said liquid discharge head is provided with a plurality of sets, each set including ~~such a~~ said liquid flow path, ~~such a~~ said discharge energy generating element, ~~such a~~ said movable member, and ~~such a~~ said temperature sensor, and

wherein the temperature rise data determined in accordance with the printing data corresponds to a ratio of number of said liquid flow paths through which

liquid is discharged from ~~[[said]]~~ the discharge port per unit hour obtained from the printing data with respect to a total number of said liquid flow paths.

12. (Currently Amended) A liquid discharge apparatus according to Claim ~~[[10]]~~ 11, further comprising a first memory for storing the data on temperature rise per unit hour detected by said temperature sensor and a second memory for storing the data on temperature rise determined in accordance with the printing data.